



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,733	10/26/2001	Karl Shubert	10004050-1	5991

7590 06/16/2005

AGILENT TECHNOLOGIES  
Legal Department, 51U-PD  
Intellectual Property Administration  
P.O. Box 58043  
Santa Clara, CA 95052-8043

EXAMINER
----------

LUU, MATTHEW

ART UNIT	PAPER NUMBER
----------	--------------

2676

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/047,733	SHUBERT ET AL.	
	Examiner	Art Unit	
	LUU MATTHEW	2676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on the amendment filed January 18, 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-16 is/are allowed.
- 6) ☒ Claim(s) 17-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

Claim 17 is objected to because of the following informalities:

Line 6, "limits;" should be - - limits. --.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gray (5,479,606) in view of Pickerd (5,978,742) or Kaplan et al (5,813,993).

Regarding claim 17, Gray discloses (Figs. 2-5) a method for measuring signals, comprising the following steps:

(a) representing a display a signal for each measured frequency channel (Figs. 3 and 4) (Column 1, lines 5-14; column 2, lines 8-13; and column 4, lines 20-27).

Gray fails to disclose displaying masks that indicate when values for the signals are outside channel frequency limits.

However, Pickerd ('742) discloses (figs. 1A and 1B) the step of displaying an eye diagram (9) for use in mask testing of an optical signal with a mask (11) as shown in Fig. 1B. See column 5, lines 1-10 and lines 26-36.

On the other hand, Kaplan ('993) also discloses the displaying of a mask for higher-frequency components that is outside the normal frequency range from 0 to 30 Hz. See column 40, lines 25-42).

Therefore, it would have been obvious to a person of ordinary skill in the art to use mask-displaying method of Pickerd or Kaplan into the method for measuring multiple signals of Gray to measure and testing the input signals.

Regarding claim 20, the method of counting the mask hits to measure the quality of signals is conventional in the art.

### ***Claim Rejections - 35 USC § 103***

Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gray in view of Pickerd or Kaplan as applied to claim 17 above, and further in view of LeCheminant et al (6,577,964).

Regarding claim 18, Gray fails to disclose the displaying masks to indicate when values for the signals are outside channel amplitude, instead of frequency.

However, LeCheminant discloses (Figs. 2A and 2B) the method of displaying the masks (M1-Mn) for testing the input signal (11) with relate to the amplitude (Fig. 2A) or the frequency (Fig. 2B).

Therefore, it would have been obvious to the person of ordinary skill in the art to use the method for displaying a mask test with relate to the amplitude into the method for measuring multiple signals of Gray to measure and testing the input signals with relate to the amplitude. Furthermore, displaying a mask test with relates to either the amplitude or the frequency is an obvious variation for measuring a signal.

Regarding claim 19, LeCheminant also discloses (Fig. 2D) the range of the scaled masks M1-Mn is the margin of the mask for measuring the quality of signal. See column 1, lines 21-25.

### ***Allowable Subject Matter***

Claims 1-16 are allowed.

### ***Response to Arguments***

Applicant's arguments with respect to claims 17-20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2676

-Mueller (6,882,217) discloses (Fig. 23) a plurality of "eye diagram" mask testing.

See column 26, lines 56-67.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUU MATTHEW whose telephone number is (571) 272-7663. The examiner can normally be reached on Flexible Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BELLA MATTHEW can be reached on (571) 272-7663. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. Luu

A handwritten signature in black ink, appearing to read "Matthew Luu", with a stylized flourish at the end.

**MATTHEW LUU  
PRIMARY EXAMINER**